

THE WISCONSIN ARCHITECT

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Municipal Reconstruction Housing Project
Hannover, Germany

Reproduced from one of a series of Kodachrome Slides
Taken by Richard W. E. Perrin

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LEIGH HUNT, F.A.I.A., *Editor and Publisher*
 ELIZABETH SCOTT HUNT, *Managing Editor*
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Concerning the Perrin Address to the Milwaukee Division

THE Meeting Schedule for the Milwaukee Division for November 10, had Eero Saarinen as the suggested guest speaker for that night, but Mr. Saarinen, having his own schedule, was to be far away in South America at that appointed time. Hence, the Program Committee got into a huddle and came up with the decision of calling upon Richard W. E. Perrin, Executive Director of the Housing Authority of the City of Milwaukee, to tell of his findings on the study tour of Germany, a part of the "American Exchange Program."

It was an inspired decision, resulting in probably the biggest turnout the Milwaukee Division has garnered and a classic such as the architects seldom have the opportunity of hearing.

The gathering, which included the wives, held forth at the Tripoli Country Club, recently, and most satisfactorily remodeled by Fritz von Grossmann, chairman of the Program Committee of the Milwaukee Division.

Mr. Perrin illustrated his talk with Kodachrome slides selected from the 300 he had taken.

We have before us his entire report and it is most unfortunate that lack of space prevents our publishing it in its entirety. The report is so thorough and so excellent, that any attempt at omission and boiling down, seems unforgivable. Yet, it is the best we can do. To give you as much of Mr. Perrin's review as possible, we will continue the report in the December issue.

You will read of Germany's problem of housing the refugees in addition to its own people left homeless by bombings. But note how he says that "even in the face of great destruction, the German city offers a charm and livability not to be found in most American cities" . . . how "it would appear that the German Government places sufficient confidence in its local building officials, its architects, and its contractors, to find it unnecessary to impose detailed prescriptions as to what the German people need in the way of housing." And for a further eye opener, take this finding: "The significant observation to be made on all German architecture since the 1920's is that the influence of the modernists, such as Gropius, Breuer, and Van der Rohe, et al, at whose shrines many architects worship, have actually had very little influence in their own native land. The Bauhaus movement, which originated in Germany and which is regarded by many students of architectural history as an important milestone in the establishment of contemporary architecture, did not expand beyond Dessau to any appreciable extent with the exception of having been transplanted to the United States."

Report of the European Study Tour Taken by Richard W. E. Perrin, Executive Director of the Housing Authority of the City of Milwaukee During the Months of August and September, 1953

THE study tour of Germany was part of the "America Exchange Program" in which the German and American Governments have cooperated during the past two years. Eighty selected Americans participated in the program during the current year; eight of this group were architects whose principal interest was housing, city planning, and reconstruction. Selection of the architects was made by the German Foreign Office upon recommendation of the American Institute of Architects. The German Government paid for the transportation from New York City and return as well as within Germany, and provided a sum of DM 40 per diem to defray living expenses while in Germany. In addition, the German Government issued an insurance policy for each participant in the sum of DM 10,000. The purpose of the America Exchange Program is to foster a better understanding of political, economic, technical and social problems and to permit a free exchange of ideas with respect to techniques, policies, and procedures concerned with solving these problems.

The itinerary was arranged by the German Foreign Office and programs had been worked out by the local government of each of the cities scheduled for a visit. The programs were well conceived and exceptionally well implemented so that it was possible for the group to accomplish in four weeks what probably would have taken four months by way of intelligent but unguided sightseeing. Excellent descriptive and illustrated material was supplied by the Foreign Office at Bonn in connection with the briefing sessions which were held during the first days of the tour. The various cities also provided well documented material relating to their program. Perhaps the most outstanding in this respect was the city of Hannover which supplied unusually well prepared informational booklets of various types. All of this material, together with approximately 300 Kodachrome slides taken by the writer, serve to compose an excellent permanent record of the tour. The schedule was very intensive and provided for continuous activities from 8:00 o'clock in the morning until late at night. Much of the travel was done during the early morning hours or later in the afternoon and evening to permit a maximum amount of daytime to be spent making actual viewing trips and other investigations. Evenings were frequently devoted to receptions with subsequent conferences for the purpose of an exchange of ideas. It should be stated that the American group was received with the greatest hospitality and friendliness and was permitted to go wherever it wished and to see whatever it desired. Cooperating with the German Foreign Office and the respective municipal gov-

ernments were the BDA (Bund Deutscher Architekten) and the Deutscher Verband für Wohnungswesen, Städtebau und Raumplanung. The programmed cities were Bonn, Köln, Düsseldorf, Essen, Hannover, Berlin, Hamburg, München, Stuttgart, and Frankfurt. In addition a visit was made to the cities of Kaiserswerth, Bochum, Marl, Duisburg, Hildesheim, Ulm, Gamisch-Partenkirchen and many smaller communities. The tour arrangements permitted a brief visit to France; a glimpse into Eire, Scotland, England and Holland and an extension of the study tour on a personal basis to include Denmark and Sweden. The observations related to the Scandinavian countries constitute a separate section of this report.

Travel within Germany was mostly by train. Contrary to the notion harbored by many people who have never been in Germany, German trains are clean, comfortable, quiet, and very punctual. Connections are also excellent so that most cities in Germany, even small ones, can be reached by train at almost anytime during the day or night. Trains are not air-conditioned and the windows are intended to be opened, with most people leaning out of them in order to enjoy the beautiful scenery which practically all of Germany offers and which, incidentally, is not defaced by billboards. German sleepers and dining cars are excellent, although not elaborate. There is, of course, some rolling stock which is obviously junk, but this is reserved for passengers and freight entering the Russian Zone, as the Russians have the quaint habit of periodically seizing German trains and contents for their own use without explanation or compensation.

The first question generally asked of someone returning from Germany is with respect to general impressions that were gained. Actually, it is very difficult to speak of general impressions because it must be understood that Germany is a land of many contrasts, both geographically and culturally, as well as in the attitudes and occupations of its people. Even speech differences are so pronounced that the composite nature of Germany's background becomes immediately apparent.

While not much larger than the State of Wisconsin, Western Germany offers a contrast in landscape comparable to the coast of New England, to the mountainous areas of Colorado, with the hills of Pennsylvania and the flatlands similar to the Missouri and Mississippi river basins lying in between. Hamburg, for instance, is a world seaport of cosmopolitan character with all of the attendant activity and interest, while 300 miles to the southeast, isolated areas

may be found which present very primitive ways of living, including agricultural processes which are almost entirely manual or with the use of oxen, to the virtual exclusion of almost any kind of mechanical equipment. Certainly, direct comparisons with the United States are most difficult to make, since frequently it would be a matter of comparing "apples and oranges" rather than two kinds of apples.

If any general impression was gained by the writer, it was the great activity in which all of Germany is engaged and which is related almost entirely to the reconstruction of its war-ravaged areas. It must be remembered that many German cities lost anywhere from one-fourth to one-half of their buildings and the task of clearing the rubble was in itself an undertaking of major proportions. With such extensive demolition, it is understandable that underground utilities would have to be replaced and there is hardly a street in a major city of Germany which is intact. Streets are being torn up where not already disrupted by military action and new sewers, water mains, gas, electric, and telephone lines are being laid everywhere. The speed with which all of this is being done is phenomenal, judged by American standards. New buildings are going up everywhere. Much of the new construction is housing, although the fact remains that there are still thousands of families living in the basements of bombed-out buildings and in other temporary shelters. When asked why the housing need was not met in its entirety before allowing the construction of new theaters, sports palaces, and particularly elaborate new office buildings for enterprise such as Toto (national lottery) the answer invariably was that "man does not live by bread alone," which is to say that life does not go on satisfactorily if nothing more than the necessities is provided.

The rubble also has not been entirely cleared in most cities, although there is a distinct difference in the extent to which cities have been able to cope with this problem. Generally speaking, and except for Berlin, the cities of Northern Germany have made greater progress in this respect than have the cities of Southern Germany. Office buildings, insurance company buildings, factories, hospitals, schools, churches, theaters, radio and TV broadcasting stations, and practically all other types of building are included in the tremendous reconstruction going on in Germany today.

Next to housing, new schools are being rushed to completion. As it is, the few remaining schools and temporary quarters used for classrooms are being worked in three shifts of four hours each, so that the education of Germany's children may continue. The exception to this pattern was found in Berlin. Berlin, of course, is an island situated in the midst of the Russian occupied zone behind the Iron Curtain and is receiving substantial assistance from Western Germany and other sources, particularly those made available by the United States. Nevertheless, the destruction was so great that it may safely be said that an additional ten years will be required to bring

Berlin up to the same level of accomplishment that characterizes some of the other North German cities.

East Berlin is still a shambles. The Russians have made a pathetic attempt to present an imposing front by the construction of buildings along the Stalin-Allee, formerly the Frankfurter-Allee. The buildings are very clumsy and poorly designed, but are intended to impress Westerners with the fact that East Berlin, too, is rebuilding. With the cooperation of HICOG (the American High Commission for Germany) a brief tour through Eastern Berlin was arranged to permit a first hand view of this spectacle.

If any other general impression may have been gained, it is the cleanliness of German cities and countryside alike. Germany has an appearance of neatness that is the collective reflection of the individual habits of its people. Flowers are to be seen everywhere. The smallest house, including temporary shelters and basements of bombed-out buildings, are adorned with flower beds, carefully nurtured. Vegetable gardens, also, are cultivated wherever there may be a patch of ground otherwise unused.

Traffic is very heavy and not very well regulated, but vehicular equipment is mostly of the lighter sort, such as bicycles, scooters, motorcycles, and midget automobiles. Gasoline is very expensive and so are automobiles, hence their limited use.

Radios are common, and TV is just coming in. There are no commercials, and the programs are kept at a rather high level. Every owner pays a small tax on his radio to pay for the broadcasting costs. Most Germans prefer this to listening to commercials which they consider insufferable.

Food is plentiful in Germany at the present time, which is not to say that all Germans are well fed. People with normal incomes, however, have no difficulty keeping their families properly nourished. The food stores, particularly meat and cheese shops, are bulging with merchandise which is bought in large quantities by the German people whose pent-up appreciation for good food has apparently not been fully satisfied after years of starvation. In the opinion of most nutritionists, the average German eats too much; but this, as it is pointed out, is ascribed to the seven years of little or nothing to eat.

With respect to clothing, of course, many people are shabbily dressed, and it is generally not very difficult to recognize the refugees who left Eastern Germany with nothing more than the clothes on their back.

Employment is high and, except for utterly unskilled people, occupational opportunities are very good. Wages are not particularly high by American standards, but based on comparable earnings currently enjoyed in other European countries, it would appear that the Germans are economically about as well, or better situated than most of their neighbors, particularly those who are presumed to have won the war.

Aside of the technical and financial problems attendant upon the reconstruction of Germany, the principal difficulties confronting Germany today are the questions of reunification and its by-product — the refugee problem.

The refugees in Germany are mostly German ex-pelees (Ausgetriebene) from the Eastern Zone and are more than 8,000,000 in number. In addition to this, there are about 140,000 displaced persons (Heimatslose), generally non-Germans, mainly from eastern European states, who had been brought to Germany as laborers during the Hitler regime or who had preferred to stay in Germany after 1945 in order to avail themselves of the protection not granted to them in their own homelands. In other words, they were generally people unable or unwilling to return to their former homes. Fifty thousand refugees are so-called "political refugees" from behind the Iron Curtain who left for reasons of political persecution. 1,600,000 persons are refugees from the Soviet occupied zone and from East Berlin itself. The housing problem of refugees is very acute. In 1939, there were 10,628,000 dwellings available in Western Germany. During the war, 2,202,000 dwellings were destroyed. Despite this tremendous loss in housing space, the population of the Federal Republic of Germany increased from 39.5 million to 48.7 million, which is 21.7%.

The great bulk of new housing produced in Germany today comes under the classification of "Sozialer Wohnungsbau" (literally social dwelling construction). It is estimated that about 90% of the housing produced in Germany today may be classified as social dwelling construction, although not the same amount of governmental assistance enters into each undertaking.

In some areas in Germany, some of the cooperative building societies are also being accused of falling into the pattern set by the operations of the independent Bauträger. A "cooperative" society in German is called "Gemeinnützig" which means literally "of common usefulness." Separated, however, the words are paronomous with "gemein" which also means mean or vulgar, and "nützig" which means venal. Accordingly, Germans with small means to invest in the activities of a building society are becoming very circumspect; and, in some cases, are actually delaying their participation in a house building venture until the legal processes have caught up with the activities of some of the building societies, particularly the Bauträger.

"Social" housing in Germany is much broader in scope than it is in the United States. The first housing law of the Federal Republic enacted in 1950 provides that the states, municipalities, and local authorities are to promote the construction of new houses to the greatest possible extent, especially as such houses, according to size, equipment, and rental, are best adapted to the needs of the greatest number of people in Germany.

The type of house building which predominates in the United States; namely, speculative building by operative builders for commercial sale to prospective buyers, is completely unknown in Germany. The

building society, whether sponsored by an individual, a cooperative group, a non-profit society, a limited dividend corporation, a stock company, or whatever other organization it may reflect, is fundamentally the German way of building housing. People desirous of obtaining a dwelling join one or the other of these organizations and procure their homes in this fashion. Individual dwellings are, of course, being built, but anyone sufficiently affluent to select this process would follow the same pattern used here in the United States by more well-to-do persons who go to an architect, have their plans prepared, and then award the construction contracts to the builders of their choice. Needless to say, the latter procedure is not particularly important in Germany at this time.

New social housing under the current program of the German Government is distributed into 75% walk-up apartments, 20% row houses, and 5% high-rise apartments. Because of their relatively high cost, single family dwellings are not being built except by private individuals or certain building societies.

In contrast to our FHA and PHA standards, German housing law contains relatively few prescriptions concerning planning, design, and equipment of social housing. It would appear that the German Government places sufficient confidence in its local building officials, its architects, and its contractors to find it unnecessary to impose detailed prescriptions as to what the German people need in the way of housing. Generally, German housing law requires that habitable space in governmentally aided dwellings should not be less than 32 square meters (342 sq. ft.), and generally not more than 65 square meters (696 sq. ft.). For large families, up to 120 square meters (1,284 sq. ft.) may be provided, but should not be more than this area as otherwise no public means will be given. German law also provides that when planning projects or housing settlements, modern theories concerning light, air, and green spaces must be applied.

Traffic streets must not run through projects; but, instead, purely residential access streets must be provided. Dwelling units must reflect present day requirements concerning the penetration of sun and light. Units must be well isolated against noise and be well provided with thermal insulation. Other than that, German housing laws simply provide that planning must be functional and useful and that the rooms must be designed to best fulfill such functions. Concerning the equipment of dwellings, it should be remarked that luxuries are avoided; but to the practical German mind, good, durable, and permanent materials are not a luxury, since the concept of a useful life of 40 to 60 years, as commonly considered in the United States, is not given much thought in Germany. Germans build permanently, and masonry construction, tile roofs, tiled bathrooms, terraces, and balconies for sitting out, as well as ample garden space are not regarded as luxuries, but as necessary adjuncts to comfortable and livable dwelling accommodations.

With further reference to income, it is important to remember that there are relatively few extremely wealthy people in Germany; but there are very many people of moderate and small means in addition to a large number of really low income persons.

(To Be Continued)

Reports on General Motors Livonia Fire Show Unprotected Steel Construction as one of Fire Weaknesses

THE following two articles, one from "Fire News", the National Fire Protection publication, and the other from the "Engineering News-Record" deal with the fire which destroyed the General Motors Automatic transmission plant in Livonia, Michigan, in August of this year. Architects will find them of great interest in that the reports cover the fire protection weaknesses and the need for more effective fire proof insulation for plants.

From Fire News

The largest industrial fire on record destroyed the General Motors automatic transmission plant. Newspapers report property damage \$35,000,000 - \$70,000,000; \$31,000,000 fire insurance, no use and occupancy insurance. The six dead included three employees killed in the fire, a fireman who suffered a fatal heart attack and two construction men electrocuted while clearing debris.

Based on preliminary reports, the fire protection weaknesses, arranged in the order of their relative importance, that combined to cause this disastrous loss were:

1. An undivided fire area of 1,492,087 sq. ft. (34.3 acres).
2. Inadequate sprinkler protection (only fifteen per cent of the area — none where fire started).
3. Unprotected steel construction, subject to burning oil vapors and condensate, including steel roof deck lacking any vent that separated at joints, permitting burning tar or asphalt to flow through.
4. Careless use of oxy-acetylene cutting torch.

To anyone under the misapprehension that some previously unknown hazardous condition must have been responsible for the Livonia fire, the following statistics from the analysis of 1952 large loss fires (individual losses \$250,000 or more) published in the January 1953 NFPA QUARTERLY will be of interest: Excessive areas without fire division walls were noted in 66 per cent of the plants destroyed. In 32 per cent flammable liquids contributed to the spread of fire, and 70 per cent of the plants lacked automatic protection. Welding or cutting sparks caused four of the fires.

The Livonia fire originated in and destroyed an undivided 1,492,087 sq. ft. one story non-combustible

building (masonry walls, steel roof framing and metal roof deck with exterior surface of asphalt, non-combustible insulation, tar paper, tar and gravel). Sparks from a cutting torch operation landed in a 120 ft. long overhead conveyor drip pan igniting drippings of 102° F. flash point rust inhibitor liquid. The overhead blaze could not be extinguished with carbon dioxide and dry chemical extinguishers, and heat ignited oil condensate on the under surface of the roof.

Flames spread rapidly beneath the roof and soon molten asphalt seeped through joints in the roof deck, adding fuel to the fire. Heat and smoke, as well as fires that soon involved some of the thousands of gallons of various oils in machinery, etc., prevented further interior fire fighting. Since the fire was beyond control before it reached the sprinklered areas, sprinklers were of no value, and when collapse of sections of roof broke piping the sprinklers were shut off. The fire eventually burned itself out.

According to Business Week (issue of August 22), "The fire at Livonia has changed the course of the entire automobile industry. As a result of the Livonia production stoppage, the industry may turn out 300,000 fewer cars in this model year than it has planned. The loss: about \$750,000,000 of sales. This plant has been the sole source of hydramatic automobile transmissions which are used not only in cars of GM's own division, but in cars of other manufacturers as well.

In Detroit the building code, according to our understanding, limits the undivided area of buildings such as this to 24,000 sq. ft. The actual area was 62 times as great, which might be interpreted to indicate 62 times the opportunity for fire to start, and 62 times the value exposed to total destruction, or 3844 times the risk ($62 \times 62 = 3844$). Was this risk calculated?

On the positive side, the GM fire has caused industrial management throughout the country to reassess the fire safety of their plants.

From Engineering News-Record

Inadequate fire protection was held to be a major cause of the oil-fed blaze that devastated the four year old General Motors plant at Livonia, Mich., last week. The speed with which the fire travelled through the structure igniting a pitch roof, resulted in complete destruction of the 1,500,000 sq. ft. building.

Arnold Renner, Chief of the Fire Marshall's Division of the State Police, charged that the building was inadequately protected. Calvin Roberts, Livonia fire chief, agreed that automatic sprinkler coverage was inadequate. Sprinkler coverage was limited to only 15 per cent of the plant and was concentrated generally in the north and south ends of the building. The huge center areas were only partially covered.

General Motors would comment only that the plant was built in conformity with building codes, fire regulations and insurance regulations. Roberts confirmed the GM statement and noted that the plant was as well protected as "90 per cent of industrial plants."

The fire exploded through the plant with frightening speed. Apparently it was set off by a spark from a welding iron which ignited a pan of Oleum, a fluid used to clean and preserve automotive parts prior to shipment. At that point the fire looked as though it could be easily controlled. Somehow, though, the fire leaped to the oil along a conveyor belt, and up to the conveyor lift itself. It raced the length of the line and up to the roof where pitch was ignited. How the fire spread so quickly is not as yet known, but there were unconfirmed reports that workmen sprayed the Oleum — an oil fed blaze with a water hose, and of course, spread the burning oil.

Besides the oil and pitch, oil soaked metal chips off machines blazed up as well. The heat was so intense that steel beams and window casings turned red hot and buckled. Building supports collapsed and sent large roof sections crashing to the floor. Flooring was of wood block, some of which had soaked up oil from machines and manufactured parts. Sections of the floor flared and burned rapidly. Large brick-walled areas caved in along with the roof.

The plant itself covered a two-block long site on Plymouth Road in Livonia, west of Detroit. It was built four years ago.

The main manufacturing section of the building was a one-story steel and brick construction, with two stories on the front to accommodate offices.

Receiving and shipping docks and a railroad siding with overhead cranes were on the west side of the plant.

Cost of the building has been estimated unofficially at \$22.5 million dollars.

The damage, including the equipment, has been estimated at over 55 million dollars.

The following information is based on conversation with Mr. R. M. L. Russell of the F.I.A. of Hartford, Conn.:

"A complete report on the fire will be based upon Mr. Russell's own reports to company officials of F.I.A. A published report from the company is not expected before 6 weeks and will be available to all who request it.

We did, however, discuss the fire and the cause of the spread of the fire. It must be remembered that our conversation was strictly unofficial, yet based upon opinions that will in all probability be published in an official report. Actually, the metal decking was the cause of the spread of the fire in the following manner: The fire started in the machine shop at one end of the building. Actually, there is little to burn in a machine shop, yet there was sufficient heat to cause the metal decking to buckle without immediate collapsing. Due to the heat also, the roofing pitch flowed toward the depression in the deck, creating a small lake of pitch which dropped through the broken joints. It was this dripping of flaming pitch which spread from one end to the other in a progressive stage lasting about 1½ hours. In effect it amounted to a shower of flaming pitch. The roofing was a 15-year bonded roof. At no time were the firemen able to penetrate the exterior to fight the fire from the inside. As a result, from pictures shown me, the walls buckled inward at a point about midway in the building length.

Mr. Russell was at the site, flying from Hartford, while the building was still aflame, and was able to witness the above. Certain portions of the building were sprinkled, but not the entire area. No fire walls were built when the building was constructed. This fire was the biggest claim against F.I.A. in the company's history. Mr. Russell has concluded that future buildings of this size should be built narrower, allowing a greater coverage from the fire fighters hose, from the exterior. Also, he is not favorable toward metal decking and is inclined toward the precast concrete or similar material that will not buckle in the early stage of a fire or something that will drop and allow water penetration from the top. The metal decking did not drop nor did it stay in place. Since Mr. Russell returned from the scene of the fire only last week his reports are not quite complete.

(Continued on Page 8)

(Continued from Page 7)

The following comment was received from the Factory Insurance Association on September 2, 1953:

"It very definitely is our feeling that the roof covering on the metal deck contributed materially to the extent of this fire."

Mr. C. Thompson of the Truscon Laboratories told us that there also was a fire in Detroit on February 29, 1952 which destroyed 300,000 sq. ft. of metal roof deck on the Ford Motor Company truck plant, also located in Livonia. Mr. Thompson had the opportunity to observe this fire and in the areas adjacent to where the fire stopped there were rat tails of pitch dripping down at approximately 6" intervals from each joint of the metal roof deck. The heat, we feel, was transmitted so fast through the metal deck, it melted the tar which in turn ignited, thereby spreading the fire.

There was another fire in 1950 on a 270,000 sq. ft. building of the Creole Petroleum Company, subsidiary of the Standard Oil Company. This roof was covered with a Robertson Metal Deck and with 2" of foam-glass insulation laid in asphalt and the joints sealed with asphalt. In addition, it had a tar and felt roof. This roof was completely destroyed notwithstanding the foamglass insulation, but because the foamglass was laid in asphalt.

Mr. Thompson sent us several photographs taken following a fire at the Pontiac Motor Division of General Motors Corp. which occurred late in April 1952. This roof was covered with Channel slabs. The fire destroyed only a small area of 3,600 sq. ft. but was confined to this area and the building was not completely destroyed.

It is our considered opinion that if Channel slabs had been used on these various jobs the fire would have been strictly localized and the great damage would have been avoided.

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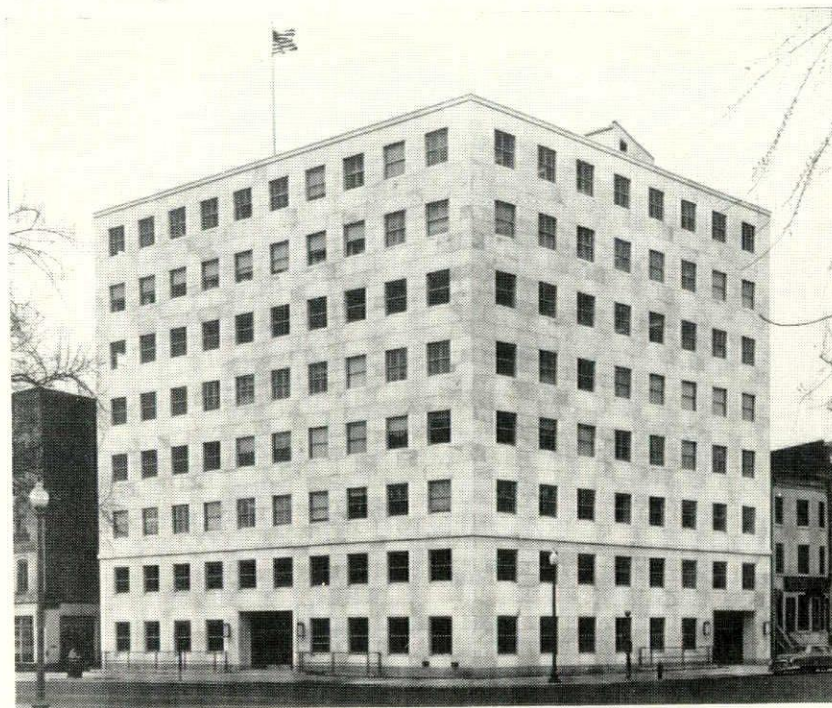
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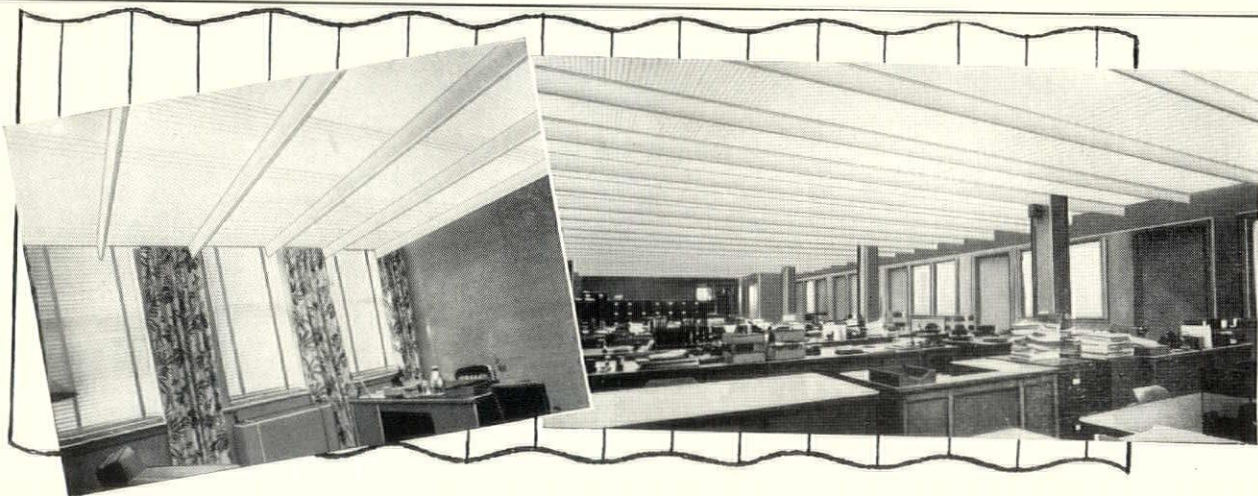
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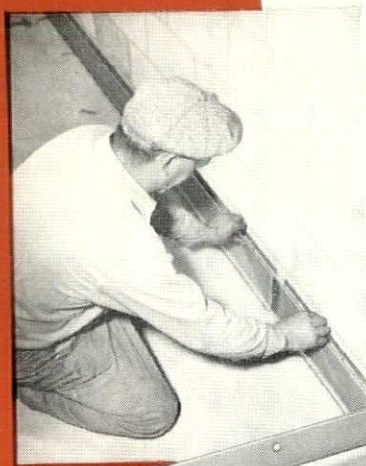


**Friction-Fit Fittings
speed installation —
eliminate unsightly
screws and welds**



This is *MILCOR** 605 Metal Base Tap It Together . . . It Lasts a Lifetime

Sections are neatly joined by use of a flat splice or aligning plate. No punching is required and there are no exposed screws.



Just tap it together — that's all there is to it! Thanks to friction-fit fittings, no punching or screws are needed. Installation is faster and you get a better looking job as well as a substantial savings in construction time. The illustration, at the lower right, shows how easy it is to use.

Sanitary, fire-safe, and durable, Milcor No. 605 Metal Base is ideal for use with asphalt, rubber tile, or linoleum floors. It has a prime coat for easy finishing to match or contrast

with wall color. Moreover, it does not pull away from the wall — does not crack or splinter. That's why you find Milcor No. 605 Metal Base in your most modern buildings, such as hospitals, schools, hotels, apartments, office and industrial buildings.

No. 605 is representative of a complete line of Metal Base available for all types of installation. If you need further information, just write us and we'll take care of your request immediately.

INLAND STEEL PRODUCTS COMPANY

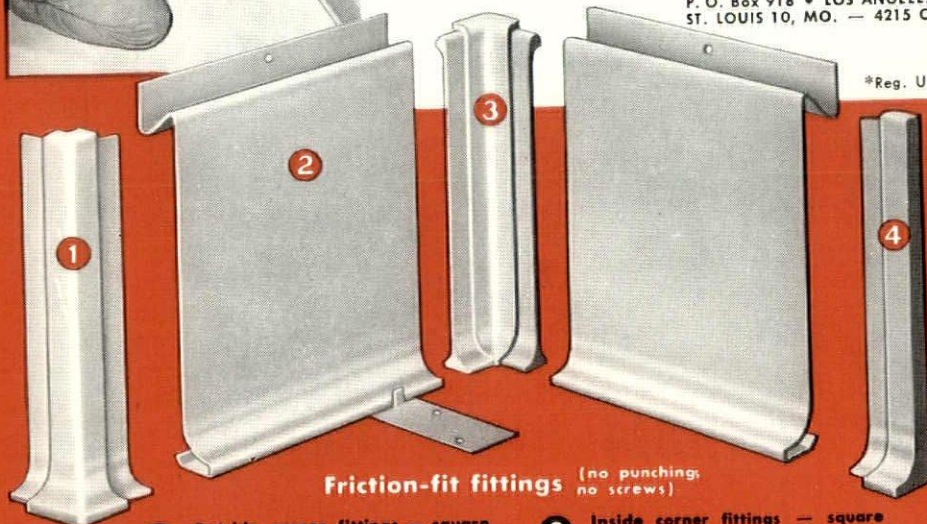
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M-12



Friction-fit fittings (no punching, no screws)

1 Outside corner fittings — square or $\frac{3}{4}$ " radius, cast.

2 No. 605 Metal Base Section — 4" and 6" heights in standard 10-ft. lengths.

3 Inside corner fittings — square or $\frac{3}{4}$ " radius, cast.

4 End-stop — left and right hand, cast.

Flush-type, plastered-in design

